

Newton-room research project – International seminar

Time: December 7th and 8th

Place: Brumunddal

Program

December 6th

All participants arrive in Brumunddal late afternoon or evening. Train from Oslo airport Gardermoen to Brumunddal leaves every hour and takes one hour and four minutes. Train times: 14.59, 15.59, 16.59 etc. – latest one 23.59 – and costs NOK 200-250 depending on availability of tickets.

The hotel, Wood hotel by Frich's, is within walking distance from the train station, but you can also be picked up by car if you let us know in advance when you will be arriving. Hotel website: <https://frich.no/wood-hotel>

List of participants:

- Newton-room teachers – Anette Kjelsrud and Tone Sigurdson, Newton-room teachers at Newton Ringsaker
- First Scandinavia – Ingvill Berg, pedagogical manager and Pedrikke Johansdotter Votvik, Newton pedagogue.
- International partners:
 - Lars Sejersgård Jakobsen, lector, Københavns Professionshøjskole.
 - Femke Sporn and Dunja Rohenroth, PhD-candidates, IPN, Kiel.
- Invited guests:
 - Michiel Veldhuis, associate professor, Freudenthal Institute, Utrecht university
 - Morten Christensen, associate professor, UCL Erhvervsakademi og professionshøjskole
- Newton-room research group - Senja Celius, PhD-candidate; Leonie Johann, Post Doc candidate; Marja van den Heuvel Panhuizen, professor; Fredrik Rusk, associate professor; Wenche Rønning, associate professor and project leader

December 7th

Venue: Newton-room Ringsaker

08.35	Meet in hotel reception.
08.45	Transport to the Newton-room.
09.00-09.15	Welcome, presentation of participants.
09.15-10.00	Presentation of the Newton-room concept, national and international situation - Ingvill. Presentation of the research project – Wenche
10.00-10.15	Presentation of the Newton module “Fractions” – Ingvill, Tone and Anette

- 10.15-10.30 Coffee break
- 10.30-12.00 Preliminary findings and data session – Senja, Fredrik, Wenche, Leonie and Marja
- 12.00-13.00 Lunch
- 13.00-15.30 Cont. preliminary findings and data session (incl. coffee break)
- 15.30-15.45 Experiences from participation in the research project – Ingvill, Anette and Tone

The sessions on Preliminary findings and data session (10.30 onwards) will be organized in such a way that we will all be active in looking at and analysing data, coming up with ideas as well as responding to findings and analysis presented by the project group.

- 16.00-19.00 Time to get to know Brumunddal or just relax at the hotel.
- 19.00 Dinner

December 8th

Venue: Newton-room Ringsaker

- 08.35 Meet in hotel reception.
- 08.45 Transport to the Newton-room
- 09.00-09.15 Good morning, getting started
- 09.15-10.15 Using motion sensor technology to elicit graphical reasoning and functional thinking - Michiel Veldhuis, Freudenthal Institute, Utrecht university
- 10.15-10.30 Break
- 10.30-11.45 Enriching mathematical tasks – lecture and practical task in groups – Marja van den Heuvel Panhuizen, Nord university
- 11.45-12.00 Break
- 12.00-12.45 Model for didactic reconstruction – a model to be used when developing Newton-modules? – Leonie Johann, Nord university
- 12.45-13.30 Lunch

Train times from Brumunddal to Gardermoen: 13.51, 14.49, 15.50 – duration approx. one hour and 10 minutes.